

Polypterus Lapradei, sp. n., and Polypterus senegalus.

By F. STEINDACHNER.

The author has discovered that in the two species of Ganoid fishes above mentioned external branchiæ occur when they are young. In his new species, *P. Lapradei*, the branchiæ persist in individuals 19 inches long. They consist of a long, flattened band, with fringed edges, very like the external branchiæ of the axolotls; there is a single one on each side behind the operculum, and it does not pass the posterior margin of the pectoral fin. In *P. senegalus* this transitory organ disappears sooner, and is no longer to be found in specimens measuring $3\frac{1}{2}$ –4 inches in length. That these are respiratory organs has been proved by the anatomical investigations of Prof. Hyrtl.—Note by M. A. Duméril, *Comptes Rendus*, Oct. 18, 1869, p. 898.

Large Trees in Australia.

On this subject the government director of the Botanic Garden at Melbourne furnishes some interesting details, as follows:—"The marvellous height of some of the Australian (and especially the Victorian) trees has become the subject of closer investigation since of late (particularly through the miners' tracks) easier access has been afforded to the back gullies of our mountain-system. Some astounding data, supported by actual measurements, are now on record. The highest tree previously known was a Karri Eucalyptus (*Eucalyptus colossea*), measured by Mr. Pemberton Walcott, in one of the delightful glens of the Warren River, in Western Australia, where it rises to approximately 400 feet high. Into the hollow trunk of this Karri, three riders, with an additional pack-horse, could enter and turn in it without dismounting. At the desire of the writer of those pages (Dr. Müller), Mr. D. Bogle measured a fallen tree of *Eucalyptus amygdalina*, in the deep recesses of Daudenong (Victoria), and obtained for it the length of 420 feet, with proportionate width; while Mr. G. Klein took the measurement of a Eucalyptus on the Black Spur, ten miles distant from Healesville, 480 feet high. . . . It is not at all likely that, in these isolated inquiries, chance has led to the really highest trees, which the most secluded and the least accessible spots may still conceal. It seems, however, almost beyond dispute that the trees of Australia rival in length, though evidently not in thickness, even the renowned forest giants of California, *Sequoia Wellingtonia*, the highest of which, as far as the writer is aware, rises, in their favourite haunts at the Sierra Nevada, to about 450 feet. . . . Thus to Victorian trees the palm must be conceded for elevation."—*Mossman's Origin of the Seasons*, p. 367.